

Remarks

This Amendment After Final is in response to the Office Action dated **February 2, 2010**. Claims 25 and 43-44 were withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a non-elected species. Claims 45-47 were rejected under 35 U.S.C. § 112, first paragraph, for failure to comply with the written description requirement. Claims 21-24, 29-30, 39-41 and 45-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Butaric et al (US 6,033,380) in view of Bersin (US 5,383,856).

Applicant requests reconsideration and allowance of the pending claims.

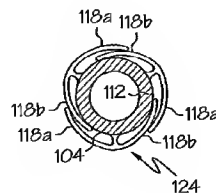
Claim Rejections – 35 U.S.C. § 112

Claims 45-47 were rejected under 35 U.S.C. § 112, first paragraph, for failure to comply with the written description requirement. Claims 45-47 each state the following:

“when the balloon is in its contracted condition, the entirety of either the first wing or the second wing of each of the structures is prone and face to face without obstruction to the material of the balloon wall of the central portion.”

The Examiner stated that the claims contain subject matter in such a way as to reasonably convey that the inventors had possession of the claimed invention. Office Action, p. 2, ¶ 3.

“An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, *figures*, diagrams, and formulas that fully set forth the claimed invention.” MPEP § 2163 (citing *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997)) (emphasis added). FIG. 12 (reproduced below) shows the balloon in its contracted condition.



As shown in FIG. 12, the second wing 118b is “prone” and “face to face” with the balloon wall of the central portion without obstructing the balloon wall. Therefore, Applicant shows possession of the claimed invention in FIG. 12, and the rejection should be withdrawn.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 21-24, 29-30, 39-41 and 45-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Butaric et al (US 6,033,380) in view of Bersin (US 5,383,856).

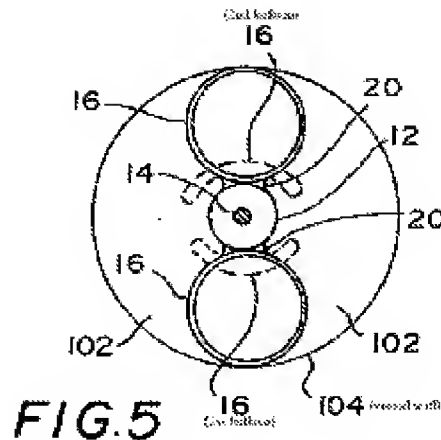
Claims 21-24, 39, and 45

Independent claim 21 is directed to a medical balloon having a plurality of structures formed in a body portion of the balloon, each structure comprising a base, a first wing, and a second wing. The second wing of each structure overlaps a first wing of an adjacent structure, and when the medical balloon is in its expanded condition, the body portion of the medical balloon has a circular cross-section (as shown in FIG. 2).

The Office Action asserts that “it would have been obvious to one having ordinary skill in the art at the time the invention was made to have folded the structures of Butaric into a T-shape with first and second wings, in the manner taught by Bersin, to obtain even expansion.” Office Action, p. 3, ¶ 5. However, Butaric and Bersin cannot be combined in the manner asserted to reach the language of claim 21.

Butaric teaches a balloon wall with a plurality of structures each having a first wing that overlaps the first wing of an adjacent second structure.

FIG. 5 of Bersin (reproduced below) shows two balloons 16 each adhered with adhesive 20 to a central lumen 14, each balloon forming an arcuate structure in the unexpanded state, which the Office Action asserts is a “T-shaped structure.” Each structure forms a separate lumen of the double helical balloon catheter device. Col. 5, l. 38-65. None of the wings of the first arcuate structure overlap with a wing of the second arcuate structure.



The so called "T-shaped structure" identified in the Office Action is actually a combination of the arcuate surface with adhesive extending therefrom to lumen 12. This structure is not a base in the form of "a double layer of the balloon wall" as required by the claim.

Thus, even if, for the sake of argument, the structure of Bersin were combined with that of Butaric, the resulting structure would not render the instant claims obvious.

Applicant further notes that the structures shown in Bersin fail to overlap one another. Neither of the references teach or suggest an overlapping structure each having a base, a first wing, and a second wing as claimed, as required by the claims.

Even if, for the sake of argument only, balloon 16 of Bersin were considered to form a "T-shaped structure" in the unexpanded state, the combination of Butaric and Bersin does not teach a body portion of the balloon having a circular cross-section in the expanded condition as claim 21 recites. Each structure in Bersin forms a separate balloon lumen. Thus, the combination of Butaric and Bersin at most teaches that each "T-shaped structure" along the balloon wall forms a separate balloon lumen upon expansion along the surface of the balloon. FIG. 6B in Butaric shows six single-winged structures, so the combination of Butaric and Bersin would have six "T-shaped structures" forming six separate lumens.

Furthermore, since the so-called "T-shaped structures" of Bersin each form a separate balloon lumen, it is unclear from the references that expansion of the structures is possible when the structures are overlapped as claimed in claim 21. Even if the structures could expand, neither reference teaches or suggests that even expansion can be obtained during inflation of overlapping "T-shaped structures", as asserted in the Office Action.

For these reasons, the rejection of claim 21 should be withdrawn and the claim

allowed. Claims 22-24, 39, and 45 depend from allowable claim 21. The rejections of those claims should be withdrawn, and the claims allowed.

Claims 29-30, 40, and 46

Independent claim 29 is also directed to a medical balloon having a plurality of structures formed in a body portion of the balloon, each structure comprising a base, a first wing, and a second wing. The second wing of each structure overlaps a first wing of an adjacent structure, and, when the medical balloon is in its expanded condition, the balloon wall has a circular cross-section.

The arguments presented above with respect to claim 21 are applicable here also. Neither reference teaches or suggests that the structures of Butaric and Bersin could be folded into overlapping structures each having a base, a first wing, and a second wing. The combination of Butaric and Bersin teaches that each so-called "T-shaped structure" along the balloon wall forms a separate balloon lumen upon expansion along the surface of the balloon. Since the so-called "T-shaped structures" in Bersin each form a separate balloon lumen, it is unclear from the references that expansion of the structures is possible when the structures are overlapped as claimed in claim 29. Moreover, as discussed above, the resulting structure would not be circular in cross-section.

Therefore, the rejection of claim 29 should be withdrawn and the claim allowed. Claims 30, 40, and 46 depend from allowable claim 29. The rejections of those claims should also be withdrawn and the claims allowed.

Claims 41 and 47

Independent claim 41 is also directed to a medical balloon having a plurality of structures formed in a body portion of the balloon, each structure comprising a base, a first wing, and a second wing. The second wing of each structure overlaps a first wing of an adjacent structure, and, when the medical balloon is in its expanded condition, the balloon wall has a circular cross-section.

The arguments presented above with respect to claim 21 are applicable here also. Neither reference teaches or suggests that the structures of Butaric and Bersin could be folded

into overlapping structures each having a base, a first wing, and a second wing. The combination of Butaric and Bersin teaches that each so-called "T-shaped structure" along the balloon wall forms a separate balloon lumen upon expansion along the surface of the balloon. Since the so-called "T-shaped structures" in Bersin each form a separate balloon lumen, it is unclear from the references that expansion of the structures is possible when the structures are overlapped as claimed in claim 41. Moreover, as discussed above, the resulting structure would not be circular in cross-section.

Therefore, the rejection of claim 41 should be withdrawn and the claim allowed. Claim 47 depends from allowable claim 41. The rejection of claim 47 should also be withdrawn and the claim allowed.

Conclusion

Applicant believes that claims 21-24, 29-30, 39-41, and 45-47 are in condition for allowance. Notice to that effect is respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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